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NOTICE OF ALLOWANCE AND FEE(S) DUE

22852 7590 01/13/2009

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP

901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413 EXAMINER
PENG, CHARLIE YU

PAPER NUMBER

ART UNIT

DATE MAILED: 01/13/2009

 APPLICATION NO.
 FILING DATE
 FIRST NAMED INVENTOR
 ATTORNEY DOCKET NO.
 CONFIRMATION NO.

 10/584/988
 03/01/2007
 Alexis Debut
 09/875.0377
 7846

TITLE OF INVENTION: LOW POLARISATION MODE DISPERSION (PMD) OPTICAL FIBER LINK, AND METHOD OF MAKING THE SAME

| APPLN. TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | NO | \$1510 | \$300 | \$0 | \$1810 | 04/13/2009 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

| INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notificat | form should be used I correspondence including d below or directed off tions. | or trang the nerwise | nsmitting the ISSU Patent, advance or in Block 1, by (a | TE FEE and PUBLIC ders and notification i) specifying a new o | of n | ON FEE (if requi naintenance fees w pondence address; | red). E ill be and/or | Hocks 1 through 5 sh mailed to the current (b) indicating a sepa | tould be completed where correspondence address as rate "FEE ADDRESS" for |
|--|---|---|---|--|---|--|---|---|--|
| CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) | | | | Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. | | | | | |
| LLP 901 NEW YORF | IENDERSON, FA | 1/2009 ARAI | BOW, GARR | ETT & DUNNE | Rher | Cer | ificate | of Mailing or Trans | |
| WASHINGTON | , DC 20001-4413 | | | | | | | | (Depositor's name) |
| | | | | | | | | | (Signature) |
| | | | | | | | | | (Date) |
| APPLICATION NO. | FILING DATE | | | FIRST NAMED INVENTOR | | | ATTORNEY DOCKET NO. | | CONFIRMATION NO. |
| 10/584,988 | 03/01/2007 | | | Alexis Debut | | | | 09875.0377 | 7846 |
| TITLE OF INVENTION | | | | | | | | | |
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| EXAM | INER | | ART UNIT | CLASS-SUBCLASS | S | | | | |
| PENG, CHA | ARLIE YU | | 2883 | 385-050000 | -050000 | | | | |
| "Fee Address" indi PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A | ess an assignee is ident h in 37 CFR 3.II. Comp | " Indicated. Us | ation form e of a Customer BE PRINTED ON | or agents OR, alter (2) the name of a registered attorney 2 registered patent listed, no name wi | rnativ single or a t attor Il be p or typ he pa g an a | e firm (having as a gent) and the name meys or agents. If opinted, e) atent. If an assignassignment. | memb s of up no nam | er a 2o to e is 3 | ocument has been filed for |
| Please check the appropri | iate assignee category or | catego | ories (will not be pr | inted on the patent): | | Individual 🚨 Co | rporati | on or other private gro | up entity Government |
| 4a. The following fee(s) are submitted: Itsue Fee Publication Fee (No small entity discount permitted) Advance Order - # of Copies | | | | 4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) A check is enclosed. Paymen by credit card. Form PTO-2038 is attached. The Director is bretsy authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Depoid Account Number economic and extra copy of this form). | | | | | |
| | s SMALL ENTITY state | ıs. See | 37 CFR 1.27. | b. Applicant is no | o long | ger claiming SMAI | LENT | TITY status. Sec 37 CF | R 1.27(g)(2). |
| NOTE: The Issue Fee and interest as shown by the r | d Publication Fee (if req ecords of the United Sta | uired) ites Pat | will not be accepted ent and Trademark | from anyone other the Office. | han th | ne applicant; a regi | stered a | ittorney or agent; or th | e assignee or other party in |
| Authorized Signature | | | | Date | | | | | |
| Typed or printed name | | | | Registration No | | | | | |
| This collection of inform an application. Confident submitting the completed this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223 | ation is required by 37 C tiality is governed by 35 I application form to the ons for reducing this bu irginia 22313-1450. DO 13-1450. | U.S.C U.S.C USP1 rden, sl O NOT | 311. The informatic . 122 and 37 CFR [O. Time will vary hould be sent to the SEND FEES OR | on is required to obtain 1.14. This collection in depending upon the e Chief Information C COMPLETED FORM | n or n is est indiv Office IS TO | etain a benefit by the imated to take 12 r idual case. Any co r, U.S. Patent and THIS ADDRESS | ne publ ninutes mment Fraden . SENI | ic which is to file (and to complete, includin s on the amount of tir nark Office, U.S. Depa D TO: Commissioner I | by the USPTO to process) g gathering, preparing, and ne you require to complete atment of Commerce, P.O. for Patents, P.O. Box 1450, |

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| 10/584,988 | | 03/01/2007 Alexis Debut | | 09875.0377 | 7846 | |
| 22852 | 7590 | 01/13/2009 | | EXAMINER | | |
| FINNEGAN, | HENDER | PENG, CHARLIE YU | | | | |
| LLP | | | | ART UNIT | PAPER NUMBER | |
| 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413 | | | | 2883 | | |

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

Notice of Allowability

| Application No. | Applicant(s) | |
|-----------------|--------------|--|
| 10/584,988 | DEBUT ET AL. | |
| Examiner | Art Unit | |
| CHARLIE DENG | 2883 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative

- of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.
- This communication is responsive to amendment filed 15 October 2008.
- The allowed claim(s) is/are 24-48.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - b) \(\subseteq \text{Some* c} \) \(\subseteq \text{None of the:} \) a) \square All
 - 1. T Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No.
 - 3.
 ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6.

DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2. Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3. Information Disclosure Statements (PTO/SB/08),
- Paper No./Mail Date 4. T Examiner's Comment Regarding Requirement for Deposit
- of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date
- 7.

 Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. ☐ Other

DETAILED ACTION

Reasons for Allowance

1. The following is an examiner's statement of reasons for allowance:

Applicant's argument with respect to amended claims is persuasive that relevant prior art does not teach or suggest a plurality of optical fiber spans obtained from different fibers and void of zero spin rate sites being joined or optically linked together in combination with rest of the limitations or a method of making the same since the portion where fiber spans are joined together (Bohnert) or the portion where the helicity changes between fiber spans (Evans) has a zero spin rate. This is an improvement upon prior art and critical to the invention because having fiber sites of zero spin rate is detrimental for the PMD of the fiber because there is an increase in the effective birefringence seen by the pulse and thus a higher contribution for PMD as pointed out by applicant.

2. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHARLIE PENG whose telephone number is (571)272-2177. The examiner can normally be reached on 8 am - 5 pm M-F.

Application/Control Number:

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Frank G. Font can be reached on (571) 272-2415. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

12/30/2008

/CHARLIE PENG/ Primary Examiner, Art Unit 2883